

## Abstract

Disclosing a method for screening a protein interactive with PPAR in a ligand-dependent manner, works as a useful tool for screening a drug ameliorating insulin resistance. By the method, ECHLP as a main action ligand-dependent PPAR binding molecule, FLJ13111 as a main action ligand-selective factor interactive with PPAR $\gamma$  and AOP2 as an adverse action ligand-dependent PPAR binding molecule were obtained. By using ECHLP interactive with PPAR, FLJ13111 interactive with PPAR and AOP2 interactive with PPAR, a screening system for a drug ameliorating insulin resistance is constructed and disclosed, the drug giving selectively the main action with no occurrence of the adverse action. Additionally, a method for producing a pharmaceutical composition for ameliorating insulin resistance is disclosed, which contains as the active component, a promoting agent of the main action through PPAR, an agonist specific to the main action through PPAR, an inhibitor of ECHLP interactive with PPAR to promote the main action through PPAR, a substance suppressing the adverse action through PPAR $\gamma$ , an inhibitor of AOP2 interactive with PPAR to suppress the adverse action through PPAR $\gamma$ , an activating agent of FLJ13111 interactive with PPAR to promote the main action through PPAR or an activator of FLJ13111 expression.